IN THE CLAIMS:

Please cancel Claims 1-~~26~~ 23 and replace them with Claims ~~27-49~~ 24 46:

-- 24
~~27~~. A nucleic acid molecule encoding a protein with the function of a wheat isoamylase, selected from the group consisting of

(a) a nucleic acid molecule encoding a protein comprising the amino acid sequence shown under Seq ID No. 3,

(b) a nucleic acid molecule comprising the nucleotide sequence shown under Seq ID No. 2 or a part thereof or a ribonucleotide sequence corresponding hereto;

(c) a nucleic acid molecule which hybridizes with a nucleic acid molecule mentioned under (a) or (b) or is complementary thereto, and

(d) a nucleic acid molecule whose nucleotide sequence deviates from the sequence of a nucleic acid molecule mentioned under (a), (b) or (c) owing to the degeneracy of the genetic code,

the nucleic acid molecule mentioned under (a), (c) and (d) having a homology of over 90% with Seq ID No. 2.

25
~~28~~. A nucleic acid molecule as claimed in claim ~~27~~ 24 which is a DNA molecule.

26
~~29~~. A DNA molecule as claimed in claim ~~28~~ 25 which is a cDNA molecule.

27
~~30~~. A nucleic acid molecule as claimed in claim ~~27~~ 24 containing regulatory elements.

28
~~31~~. A nucleic acid molecule as claimed in claim ~~27~~ 24 which is an RNA molecule.

29
~~32~~. A nucleic acid molecule which specifically hybridizes with a nucleic acid molecule as claimed in claim ~~27~~ 24 and has a homology of over 90% with Seq ID No. 2.

30
~~33~~. A nucleic acid molecule as claimed in claim ~~32~~ 29 which, is an oligonucleotide with a length of at least 15 nucleotides.

34. A vector containing a DNA molecule as claimed in claim 24 27.

35. A vector as claimed in claim 31 34 wherein said nucleic acid molecule is linked in sense orientation to regulatory elements which ensure transcription and synthesis of a translatable RNA in pro- or eukaryotic cells.

36. A vector as claimed in claim 31 34 wherein said nucleic acid molecule is linked in sense orientation to regulatory elements which ensure the synthesis of an untranslatable RNA in pro- or eukaryotic cells.

37. A vector as claimed in claim 31 34 wherein said nucleic acid molecule is linked in antisense orientation to regulatory elements which ensure the synthesis of an untranslatable RNA in pro- or eukaryotic cells.

38. A host cell which is transformed with a nucleic acid molecule as claimed in one or more of claims 24 27 to 28 31 or a vector as claimed in one or more of claims 31 34 to 34 37 or which is derived from such a cell.

39. A process for the preparation of a protein as claimed in claim 36 39 wherein a host cell as claimed in claim 37 38 is cultured under conditions which permit said protein to be synthesized and said protein is isolated from the cultured cells and/or the culture medium.

40. A process for generating a transgenic plant cell, wherein
a) a nucleic acid molecule as claimed in one or more of claims 24 27 to 28 31
or
b) a vector as claimed in one or more of claims 31 34 to 34 37
is integrated into the genome of a plant cell.

41. A transgenic plant cell which has been transformed with a nucleic acid molecule as claimed in one or more of claims 24 27 to 27 30 or one or more vector as claimed in claims 31 34 to 34 37 or which is derived from such a cell.

42. A process for generating a transgenic plant cell, wherein

a1) a nucleic acid molecule as claimed in one or more of claims 27 to 31 , or

a2) a vector as claimed in one or more of claims 34 to 37 is integrated into the genome of a plant cell and

b) an intact plant is regenerated from said plant cell.

A plant containing a plant cell as claimed in claim 41.

A plant as claimed in claim 43 which is a crop plant.

A plant as claimed in claim 44 which is a starch-storing plant.

A plant as claimed in claim 45 which is a monocotyledonous plant or maize

A plant as claimed in claim 46 which is a barley, rye or wheat plant.

A propagation material of a plant as claimed in one or more of claims 43 to 47 .

The use of a plant cell as claimed in claim 41 , a plant as claimed in one or more of claims 43 to 47 or of propagation material as claimed in claim 48 for the production of starch.